

**AMENDMENTS TO CLAIMS**

1-4. (Canceled)

5. (Currently amended) A method for processing information on nucleotide sequence, comprising steps of: (a) receiving positional information representing a position in a nucleotide sequence in accordance with a request for an object and/or service; (b) obtaining, from among a plurality of pieces of nucleotide sequence-related information associated with positional information, nucleotide sequence-related information associated with positional information corresponding to the positional information received in step (a); (c) transmitting the nucleotide sequence-related information obtained in step (b); and (d) receiving semantic information implied by the nucleotide sequence-related information transmitted in step (c) and/or information associated with the semantic information in association with positional information; and

wherein the method further comprises step (e) of determining whether or not there is consistency between the positional information received in step (d) and positional information related to the nucleotide sequence-related information transmitted in step (c); and

~~The method for processing information according to claim 4,~~ wherein step (e) comprises alerting ~~[[the]]~~ a party that ~~[[had]]~~ received the nucleotide sequence-related information transmitted in step (c) when there is no consistency between the positional information received in step (d) and the positional information associated with the nucleotide sequence-related information transmitted in step (c).

6. (Currently amended) A method for processing information on nucleotide sequence, comprising steps of: (a) receiving positional information representing a position in a nucleotide sequence in accordance with a request for an object and/or service; (b) obtaining, from among a plurality of pieces of nucleotide sequence-related information associated with positional information, nucleotide sequence-related information associated with positional information corresponding to the positional information received in step (a); (c) transmitting the nucleotide sequence-related information obtained in step (b); and (d) receiving semantic information implied by the nucleotide sequence-related information transmitted in step (c)

and/or information associated with the semantic information in association with positional information; and

wherein the method further comprises step (e) of determining whether or not there is consistency between the positional information received in step (d) and positional information related to the nucleotide sequence-related information transmitted in step (c); and

~~The method for processing information according to claim 4,~~ wherein step (e) comprises disclosing ~~[[the]]~~ information concerning ~~[[the]]~~ a party that ~~[[had]]~~ received the nucleotide sequence-related information transmitted in step (c) to a third party when there is no consistency between the positional information received in step (d) and the positional information associated with the nucleotide sequence-related information transmitted in step (c).

7. (New) An apparatus for processing information on nucleotide sequence, comprising:

a transmitter/receiver for receiving positional information representing a position in a nucleotide sequence in accordance with a request for an object and/or service; and

a controller for obtaining, from among a plurality of pieces of nucleotide sequence-related information associated with positional information, nucleotide sequence-related information associated with positional information corresponding to the positional information received by the transmitter/receiver;

wherein the transmitter/receiver transmits the nucleotide sequence-related information obtained by the controller, and receives semantic information implied by the transmitted nucleotide sequence-related information and/or information associated with the semantic information in association with positional information; and

wherein the controller determines whether or not there is consistency between the positional information received by the transmitter/receiver along with the semantic information and/or the information associated with the semantic information and positional information related to the nucleotide sequence-related information transmitted by the transmitter/receiver; and

wherein the controller allows the transmitter/receiver to output an alert to a party that received the nucleotide sequence-related information transmitted by the transmitter/receiver when there is no consistency between the positional information received by the transmitter/receiver along with the semantic information and/or the information associated with

the semantic information and the positional information associated with the nucleotide sequence-related information transmitted by the transmitter/receiver.

8. (New) An apparatus for processing information on nucleotide sequence, comprising:

a transmitter/receiver for receiving positional information representing a position in a nucleotide sequence in accordance with a request for an object and/or service; and

a controller for obtaining, from among a plurality of pieces of nucleotide sequence-related information associated with positional information, nucleotide sequence-related information associated with positional information corresponding to the positional information received by the transmitter/receiver;

wherein the transmitter/receiver transmits the nucleotide sequence-related information obtained by the controller, and receives semantic information implied by the transmitted nucleotide sequence-related information and/or information associated with the semantic information in association with positional information; and

wherein the controller determines whether or not there is consistency between the positional information received by the transmitter/receiver along with the semantic information and/or the information associated with the semantic information and positional information related to the nucleotide sequence-related information transmitted by the transmitter/receiver; and

wherein the controller allows the transmitter/receiver to output information concerning a party that received the nucleotide sequence-related information transmitted by the transmitter/receiver to a third party when there is no consistency between the positional information received by the transmitter/receiver along with the semantic information and/or the information associated with the semantic information and the positional information associated with the nucleotide sequence-related information transmitted by the transmitter/receiver.

9. (New) A computer-readable medium encoded with a program for performing a method for processing information on nucleotide sequence, wherein the method comprises the steps of: (a) receiving positional information representing a position in a nucleotide sequence in accordance with a request for an object and/or service; (b) obtaining, from among a plurality of pieces of nucleotide sequence-related information associated with positional information,

nucleotide sequence-related information associated with positional information corresponding to the positional information received in step (a); (c) transmitting the nucleotide sequence-related information obtained in step (b); and (d) receiving semantic information implied by the nucleotide sequence-related information transmitted in step (c) and/or information associated with the semantic information in association with positional information; and

wherein the method further comprises step (e) of determining whether or not there is consistency between the positional information received in step (d) and positional information related to the nucleotide sequence-related information transmitted in step (c); and

wherein step (e) comprises alerting a party that received the nucleotide sequence-related information transmitted in step (c) when there is no consistency between the positional information received in step (d) and the positional information associated with the nucleotide sequence-related information transmitted in step (c).

10. (New) A computer-readable medium encoded with a program for performing a method for processing information on nucleotide sequence, wherein the method comprises the steps of: (a) receiving positional information representing a position in a nucleotide sequence in accordance with a request for an object and/or service; (b) obtaining, from among a plurality of pieces of nucleotide sequence-related information associated with positional information, nucleotide sequence-related information associated with positional information corresponding to the positional information received in step (a); (c) transmitting the nucleotide sequence-related information obtained in step (b); and (d) receiving semantic information implied by the nucleotide sequence-related information transmitted in step (c) and/or information associated with the semantic information in association with positional information; and

wherein the method further comprises step (e) of determining whether or not there is consistency between the positional information received in step (d) and positional information related to the nucleotide sequence-related information transmitted in step (c); and

wherein step (e) comprises disclosing information concerning a party that received the nucleotide sequence-related information transmitted in step (c) to a third party when there is no consistency between the positional information received in step (d) and the positional information associated with the nucleotide sequence-related information transmitted in step (c).

11. (New) A computer program for performing a method for processing information on nucleotide sequence, wherein the method comprises the steps of: (a) receiving positional information representing a position in a nucleotide sequence in accordance with a request for an object and/or service; (b) obtaining, from among a plurality of pieces of nucleotide sequence-related information associated with positional information, nucleotide sequence-related information associated with positional information corresponding to the positional information received in step (a); (c) transmitting the nucleotide sequence-related information obtained in step (b); and (d) receiving semantic information implied by the nucleotide sequence-related information transmitted in step (c) and/or information associated with the semantic information in association with positional information; and

wherein the method further comprises step (e) of determining whether or not there is consistency between the positional information received in step (d) and positional information related to the nucleotide sequence-related information transmitted in step (c); and

wherein step (e) comprises alerting a party that received the nucleotide sequence-related information transmitted in step (c) when there is no consistency between the positional information received in step (d) and the positional information associated with the nucleotide sequence-related information transmitted in step (c); and

wherein processes are conducted under the control of the computer.

12. (New) A computer program for performing a method for processing information on nucleotide sequence, wherein the method comprises the steps of: (a) receiving positional information representing a position in a nucleotide sequence in accordance with a request for an object and/or service; (b) obtaining, from among a plurality of pieces of nucleotide sequence-related information associated with positional information, nucleotide sequence-related information associated with positional information corresponding to the positional information received in step (a); (c) transmitting the nucleotide sequence-related information obtained in step (b); and (d) receiving semantic information implied by the nucleotide sequence-related information transmitted in step (c) and/or information associated with the semantic information in association with positional information; and

wherein the method further comprises step (e) of determining whether or not there is consistency between the positional information received in step (d) and positional information related to the nucleotide sequence-related information transmitted in step (c); and

wherein step (e) comprises disclosing information concerning a party that received the nucleotide sequence-related information transmitted in step (c) to a third party when there is no consistency between the positional information received in step (d) and the positional information associated with the nucleotide sequence-related information transmitted in step (c); and

wherein processes are conducted under the control of the computer.